

ligament, slightly depressed in centre by ligament, nearly of equal breadth as length, and throbbing violently.

June 3d a ligature was applied about half an inch above the origin of internal iliac. For the first twenty-four hours the patient was, in every respect, in a favourable condition; after which sinking commenced, and without pain, or any appreciable lesion, he rapidly lost strength, retaining his mental powers to the last. Upon post-mortem examination, no vestiges of inflammation of any part of peritoneum were found, unless a small quantity of milky serum in track of wound be so reckoned.

41. *Wound of the Internal Carotid Artery, and Division of the Par Vagum, in which the common Carotid Artery was tied.* By S. W. FERN, Esq.—(*Prov. Med. and Surg. Journ.*, Sept. 8, 1847.)—The subject of this case was a female (Mrs. Osborn) 68 years of age, spare habit and nervous temperament. who was attacked at 5 P. M., Feb. 2d, 1847, by a man armed with a pruning knife, and received three severe stabs on the left side of the neck, and some others of a more trifling nature elsewhere. When seen by Mr. F., about three-quarters of an hour after the injury, she was in a state of extreme exhaustion. There was a deep wound about three inches in length immediately behind the angle of the jaw, extending perpendicularly downwards; another, a jagged wound, over the transverse processes of several of the middle cervical vertebrae, and a deep gaping wound midway between the occipital spinous process, and the mastoid process of the temporal bone; the other wounds being slight, need not be particularly described. There was a slight oozing of blood, but Mr. F. was unable to discover that any large arterial trunk had been injured. After waiting some time the wounds were dressed, and brandy and water were freely administered, as far as the difficulty in swallowing would permit.

Two hours after the injury, the patient, in getting out of bed to the night-chair, was attacked with an alarming hemorrhage, which, on removing the dressings, was found to proceed from the wound behind the angle of the jaw; the hemorrhage was arterial, and came forth in a stream as large as a swan-quill. Convinced that some large arterial trunk must be wounded, and most likely the internal carotid, Mr. F., in consultation, determined to place a ligature on the trunk of the common carotid. This he accordingly did, and the hemorrhage was at once arrested. The ligature came away on the 20th day, and the patient survived until the 22d of April, 79 days. During the whole of this period she had distressing difficulty of swallowing, suffered from suffocative cough, excited and very variable state of the circulation; extreme exhaustion, feebleness and emaciation came on, in which condition she sunk at the period mentioned. The following were the *post-mortem* appearances:

"Body emaciated; heart loaded with fat; lungs did not collapse on opening the chest; the left lung a good deal congested posteriorly, and the right also congested posteriorly, but to a less extent; there was much frothy muco-purulent matter in the larger bronchial tubes, and the bronchial membrane was much injected. In the neck, at the site of the ligature, the cellular membrane was condensed and firmly adherent to the adjoining structures; the point of ligation was well marked, and the artery was filled with a dense brownish-coloured fibrinous coagulum, which commenced about half an inch from the origin of the vessel; the artery was considerably diminished in size; above the ligature, and especially at the bifurcation, the vessel was contracted and hardened, and contained the same kind of fibrinous coagulum, but in a proportionately less quantity; in this situation, too, there was a very minute abscess in the coats of the artery; the posterior face of the internal carotid, immediately above the point where it is given off from the common trunk, presented a well-marked appearance of the wound which had furnished the alarming hemorrhage at the time of the injury, and in the same situation the *par vagum* was found to have been divided. (I have since found, in examining the parts after they had been some time in spirit, that the reddened line which had indicated the point of injury of the vessel, at the time of the dissection very distinctly, has disappeared from the maceration. The edges of the wound had closely united, and there is no trace of the wound on the internal coat of the artery. This condition of the parts is similar to what is stated to have

occurred in the experiments of Bécclard, and the possibility of which is likewise affirmed by Chelius. It should be stated that the wound of the vessel was *oblique* or *diagonal*, and that it had a length of about two lines. The vessel in the situation of the injury is perfectly permeable, and there is no appearance whatever of the 'plug of plastic matter' observed in the experiments of Saviard, Petit, and Scarpa.) (Vide '*Chelius' Surgery*, by South,' vol. i. p. 298.) The lower extremity of the divided nerve was shrunk and atrophied, and there was a slight enlargement (a neuroma) at the extremity of the upper divided end; there was no observable indication of wound, either of the pharynx or glottis; the subclavian artery of the left side, and the innominate with its chief and lesser branches, appeared to me to be of unusually large size. The viscera of the abdomen, and the contents of the cranium, were not examined, the friends of the patient being unwilling that any further investigation than of the parts immediately implicated should be made."

"The following," Mr. Fearn remarks, "are the chief points of interest in the foregoing case:—1st. The extreme rarity of the occurrence of a case of wound of a vessel of so much importance as the internal carotid, in which there is any opportunity of rendering surgical aid. 2d. The difficult deglutition and imperfect closure of the glottis in the act of swallowing. 3d. The excited and variable state of the circulation; and lastly, the engorged condition of the pulmonary vessels, and the consequent suffocative cough and abundant bronchial secretion.

"With regard to the first point I may state that I have been unable to meet with more than one recorded instance in which the internal carotid was *proved* to have been injured and in which the common carotid was tied. The case is related in Mr. Cooper's admirable Dictionary, and was under the care of Andersch; the common carotid was tied after a wound of the internal carotid, and the patient died on the eighth day. In the present case life was prolonged beyond the eleventh week, and looking to the state of the parts as revealed by the *post-mortem* examination, we may fairly be permitted to regard it, in a surgical point of view, as successful.

"Secondly, the difficulty of swallowing and imperfect closure of the glottis, which in the first instance were, perhaps very naturally, attributed to some injury of the pharynx and upper part of the respiratory tube, are beautifully explained by the fact of the *par vagum* having been divided. As one effect of this injury must be a paralysis of the recurrent laryngeal nerve, (a motor nerve,) and as it supplies, as I need hardly remind you, the inferior constrictor of the pharynx, and the crico and thyro-arytenoidei muscles, we are at no loss to understand the double embarrassment of the patient in the act of swallowing. Indeed so great was the distress occasioned, that at times it was almost impossible to prevail upon her to take even the small quantity of nutriment necessary to sustain life.

"The third and fourth points of interest,—namely, the irregular and hurried state of the circulation, and the difficult respiration, may properly be considered together. The irritation in the air-passages, and the abundant secretion and cough, arose probably from congestion of the pulmonary vessels, which I imagine to be caused by the sudden closure of one important outlet from the left side of the heart. It would naturally follow, if the free egress of the blood from the left ventricles were prevented, that the pulmonary veins must become engorged, and indeed the whole thoracic circulation must be obstructed—a condition which would give rise to great irritation of the pulmonary organs, and the abundant mucous secretion present in this case. A precisely similar state of things occurred in my patient, Mary Scattergood, upon whom I operated for aneurism of the arteria innominata, both after the ligature of the common carotid, and subsequently after tying the subclavian artery. I find, too, from an excellent paper by Professor Miller, of Edinburgh, in the *London and Edinburgh Monthly Journal of Medical Science*, 1842, that in the majority of the fatal cases of operation on the large arteries of the neck, he considers death is attributable to inflammation of the lungs; and my friend, Professor Fergusson, of King's College, seems to incline to the same opinion. Of course, under common circumstances, our sheet anchor in combating such symptoms would be repeated blood-lettings, and the administration of opium; but in the case of Mrs. Osborn, there were such frequent and alarming attacks of syncope, and the utter prostration and exhaustion from the

loss of blood at the time of the injury were such, that we were repeatedly driven to the employment of stimulants in large quantity, when other symptoms seemed urgently to demand an antiphlogistic mode of treatment. In short, the advanced age of the patient, and the absolutely drained condition of the vascular system, in spite of the local engorgement, forbade the use of any other remedies than opiates, expectorants, and counter-irritants, due attention being at all times had to the state of the *primæ viæ*, and the persevering and almost hourly administration of nutriment."

42. *Singular Case of Dissecting Aneurism.* By Prof. PINNIE, of Aberdeen.—In the body of a man, about fifty years of age, who, during life, had not been supposed to be the subject of any disease, and who died very suddenly, and before any medical man had an opportunity of seeing him, I met with a singular variety of dissecting aneurism. In the arch of the aorta, about three-fourths of an inch to the left side of the origin of the left subclavian artery, there was a rent of the inner and middle coats. From this rent to near the origin of the aorta, on the cardiac side, and for upwards of an inch on the capillary side, the external coat was separated from the middle, and also around nearly two-thirds of the circumference of the artery.

From the aneurism thus formed there was an opening upwards of half an inch in diameter, through which it burst into the pulmonary artery—a little below the part where that vessel gives off its two branches. The aorta was affected with steatomatous deposit in many parts, and, however rare the occurrence, there were, beyond all doubt, patches of the same kind of degeneration in the pulmonary artery. There was also slight hypertrophy of the left side of the heart.

In almost all recorded examples of dissecting aneurism, the heart has been found affected with disease, more especially its left side. In some instances there has been dilatation, with hypertrophy; in others, dilatation with attenuation; and, in many, there have been evident signs of steatomatous and calcareous deposits in different parts of the vascular system. According to Rokitsansky, dissecting aneurism sometimes commences by disease of the *middle* and *internal* coats. In that case the continuity of these coats becomes interrupted, and the separation of the external coat follows as a later event. In other instances, the first deviation from healthy condition is chronic inflammation of the *external* coat, which gives rise to separation of that coat, followed by rupture of the middle and internal coats. In the one class of cases, he considers that the rupture precedes; in the other, that it follows the separation.—*Month. Journ. Med. Sci.* Nov. 1847.

43. *Dislocation of the Pelvis.*—M. MURVILLE, in a memoir, presented to the French Academy of Medicine, on luxations of the pelvic bones, relates the two following very remarkable examples of this accident. The first was the case of an officer, who fell from a second-floor window, and lighted on the tubera ischii. The sacrum was displaced downwards by the weight of the body. On examination, the crests of the ilia were found to be almost touching the false ribs; the os coccygis, much shattered, projected considerably below. The patient complained of great pain in the sacro-iliac symphysis, with paralysis of the bladder and rectum, small pulse, and other signs of collapse. He was restored somewhat by stimulants, and when reaction was fully established, he was treated antiphlogistically, the displaced bones being maintained as motionless as possible. No attempt at reduction was considered advisable. This treatment was marvellously successful; not only did the patient survive, but the paralysis diminished, and in ten days the patient was able to walk with difficulty.

The second case is unique. An officer during a review was run away with, the horse at the same time plunging violently; in one of the plunges he was thrown considerably from his saddle, upon which he descended again with such force as to lacerate the left side of the pelvic arch, without injuring the skin. A second plunge of the animal added to the mischief, completely rupturing the ligaments of the symphysis pubis. When examined, a large inguinal hernia was discovered on the left side, and in the perineum a tumour projected as large as the fist, which could be pushed upwards into the pelvis. The symphysis pubis was separated to an extent which allowed the hand to be insinuated between the